

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2005/000351

A. CLASSIFICATION OF SUBJECT MATTER IPC ⁷ : F16L 19/028, (EC: F16L 19/028C) According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC ⁷ : F16L Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched --- Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPODOC, WPI, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,893,591 A (EBEL et al.) 13 April 1999 (13.04.1999) <i>figure 1, description.</i>	1-5, 7
X	US 2,445,578 A (E. E. HOWE) 20 July 1948 (20.07.1948) <i>entire document.</i>	1, 2, 4, 6, 7, 12
X	US 5,131,145 A (BADOUREAUX) 21 July 1992 (21.07.1992) <i>entire document.</i>	1, 2, 4, 7
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 29 April 2005 (29.04.2005)		Date of mailing of the international search report 12 May 2005 (12.05.2005)
Name and mailing address of the ISA/ AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. +43 / 1 / 534 24 / 535		Authorized officer WAGNER S. Telephone No. +43 / 1 / 534 24 / 381

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 5,283,951 A (DAVENPORT et al.) 8 February 1994 (08.02.1994) <i>entire document.</i>	1-4, 7
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A	EP 0 797 033 A1 (KABUSHIKI KAISHA) 24 September 1997 (24.09.1997) <i>figure, abstract:</i>	8-10
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